DOCUMENT RESUME

ED 133 928 EC 092 713

TITLE	Guidelines for In-Service Education: Gifted and Talented.
INSTITUTION	Georgia State Dept. of Education, Atlanta.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C.
PUB DATE	76
NOTE	48p.; Published in Cooperation with Interstate Cooperative Effort for the Gifted and Talented
EDRS PRICE	MF-$0.83 HC-$2.06 Plus Postage.
DESCRIPTORS	Elementary Secondary Education; *Gifted; *Guidelines; *Inservice Teacher Education; *Program Planning; *Talented Students

ABSTRACT

The handbook provides suggestions and guidelines to assist local education agency personnel in planning and implementing inservice education programs for the teacher of the gifted and talented. Information is presented on the following topics: the need for inservice education; twelve guiding principles for inservice education (including use of a needs assessment to plan inservice training); actual planning of the inservice program (including an inservice planning model containing dimensions for topic identification, design, strategies, resources and evaluation); and characteristics and competencies of teachers of the gifted as they relate to inservice training. Seventy-five books are listed in the reference section along with the names of relevant journals, newsletters and bulletins, and audiovisual aids. (CL)

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Guidelines for In-Service Education: Gifted and Talented

EC092713

Published by the Georgia Department of Education in Cooperation with Title V, Section 505 Project, Interstate Cooperative Effort for the Gifted and Talented.
1976

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Foreword

During 1975 and 1976, 10 states and their departments of education have been involved in the Title V, Section 505 Project, "Interstate Cooperative Effort for Gifted and Talented." Staff members of the Alabama, Georgia and South Carolina education agencies have developed a guide for educational practitioners to use in planning, organizing and conducting in-service education programs in the area of the gifted and talented. Educators from the remaining seven states worked on two other components of the project - identification of the gifted and talented and program development.

This publication attempts to summarize the viewpoints, thinking and observations of selected nationally recognized persons on the topic of education for the gifted. It is our hope that this publication will provide a useful approach to in-service education for all persons in local education agencies who in any way affect programs serving the gifted and talented. The uniqueness of local education agencies and the flexibility often needed by educational planners and implementers have been given. The guide explores several principles that affect in-service education; it also presents alternative in-service models, and examines staff and teacher competencies. Annotated references are included.

We, the undersigned, appreciate the opportunity for our respective departments of education to be a part of this project with its many valuable products and experiences. We have also found invaluable this approach to sharing experiences and staff competencies, and we hope others will find this information equally helpful.

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Acknowledgements

We offer sincere appreciation to the administrative officials in our respective states for their encouragement, support and cooperation during our involvement in this Title V project. Further appreciation is expressed to the following people, who willingly shared their knowledge and expertise.

Dr. Joseph French
Chairman, Special Education and
School Psychology Department
Pennsylvania State University

Dr. Marvin Gold
Chairman, Department of Special
Education
University of South Alabama

Dr. Leonard J. Lucito
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Staff Development
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Mrs. Peggy Glenn
Graduate Student
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In addition, acknowledgement is made to the many who through their own writings provided input that was of invaluable assistance.

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Title V Project Overview

Interstate Cooperative Effort for Gifted/Talented

On July 1, 1974, the South Carolina Department of Education was awarded a Title V, Section 505 grant to direct a ten-state effort in developing interstate cooperation and communication in the area of gifted education.

The Title V grant called for cooperative efforts among the states of Alabama, Florida, Georgia, Kentucky, Louisiana, Mississippi, North Carolina, South Carolina, South Dakota and Wyoming. James H. Turner, coordinator, Programs for the Gifted, South Carolina Department of Education, served as project director.

An Interstate Planning Conference was held in Columbia, S. C. on Sept. 11-13, 1974, with one representative from each project state participating.

An Interstate Work Conference was held in Atlanta, Ga. on Dec. 4-7, 1974, with a state agency team of five persons from each project state participating. Various consultants provided an in-depth discussion of student identification, program development and teacher training in the area of gifted education.

During Spring 1975, each project state planned and conducted a state conference appropriate to its own stage of development. Project funds were used to assist each state in this effort. Over 3,000 educators attended these conferences.

A proposal for continuation of the Title V project was approved for 1975-76 and included the development of publications in three specific areas, or components.

- Identification -- Kentucky, Louisiana and North Carolina (lead state)
- Program Development -- South Dakota, Mississippi, Wyoming and Florida (lead state)

- Teacher/Staff In-service -- Alabama, South Carolina and Georgia (lead state)

In addition to the publications, several other products were developed as a part of the Title V project. A special contract with Dr. John Rader in Indiana resulted in the refinement and production of a "Mediated Simulation on the Identification of Gifted and Talented". The ten project states also received copies of materials, booklets and original videotapes dealing with teaching strategies for the gifted; these were developed through two other contracts with Dr. Dorothy Sisk, University of South Florida, and Dr. Leonard J. Lucito and Dr. Joseph Walker, Georgia State University.

It is anticipated that the interstate cooperation developed and fostered through the Title V project and the subsequent use of the publications and audiovisual products will serve as a catalyst to project states and others in the development of programs for the gifted.

In-Service Education Terminology-Need-Mistakes-Change

INTRODUCTION

This publication was prepared for the practitioner. Its major purpose is to provide local education agency personnel with suggestions and guidelines that will assist them in planning and implementing in-service education programs for the teacher of the gifted and talented. It is not to be considered as a cookbook or a prescription pad from which one can obtain a canned in-service program. Rather, it was written with several purposes in mind: first, to examine briefly the need for in-service education, especially in the area of the gifted and talented; second, to examine some of the positive and negative factors that affect in-service education programs; third, to discuss competencies needed by both staff and teachers working with in-service education programs in the area of the gifted and talented; fourth, to set forth and discuss general principles governing in-service education programs; fifth, to provide a suggested model for educational planners and implementers to use in planning, designing and conducting in-service activities; sixth, to provide a suggested list of basic professional materials, both print and non print, that can be used for in-service in the area of the gifted.

The discussions presented in this publication are viewpoints, facts, generalizations and opinions based upon visits to model in-service programs, participation in such programs, work with leading experts in the area of the gifted and talented and a review of professional literature dealing with in-service education and the education of the gifted and talented. Each idea is presented with the hope that it will be helpful to educational planners, facilitators and implementers as they plan and initiate changes in the education of the gifted and talented.

TERMINOLOGY

The terminology used in writing or speaking about a given subject can often facilitate or deter communication. The definitions and amplification given here have been selected for their practical value in examining or thinking about the various aspects of in-service education for the teacher of the gifted and talented.

In-service education

In-service education is a process through which staff and teachers receive in-the-field training that enables them to become better professional practitioners making a direct impact upon the quality of instruction for gifted and talented students. It includes all activities aimed at the

improvement of professional personnel. In-service activities may be directed toward a number of results, for example, bringing about change. In-service education can be the planned process through which a local education agency brings about change in teacher behaviors and attitudes as well as changes in instructional programming for children. In-service education may also become the vehicle for upgrading teacher skills, involving teachers as active participants in assessing needs and planning in-service content and activities. In-service education is also a maintenance process. It often becomes the way in which local education agencies maintain the current level of programming.

Staff

In this publication, staff refers to local education agency administrators such as superintendents, assistant superintendents, directors of instruction, curriculum directors, principals, assistant principals and support personnel such as psychologists, counselors and librarians. Differentiated instructional programming for the gifted and talented requires personnel knowledgeable in the area of the gifted. Because of the differentiated staffing patterns used in many school systems, the sizes of school systems and the jobs that must be done to ensure that needs of all children and youth are met, a single individual cannot be expected to assume total responsibility for gifted and talented programming. Therefore, it is essential that designated staff members be involved in in-service education in the education of the gifted and talented.

Teachers

In this publication, teachers refers to those instructional personnel who give direct services to gifted and talented students on either a full-time or part-time basis. The term "teacher" is used generically to include all who in some capacity provide a direct service to students.

Gifted and Talented

For the purposes of this publication, gifted and talented children are defined as "those identified by professional qualified persons who, by virtue of outstanding abilities, are capable of high performance. These are children who require differentiated educational programs and/or services beyond those normally provided by the regular school program in order to realize their contribution to self and society. Children capable of high performance include those with demonstrated achievement and/or potential ability in any of the following areas, singly or in combination.

- general intellectual ability
- specific academic aptitude
- creative or productive thinking
- leadership ability
- visual and performing arts
- psychomotor ability

It can be assumed that utilization of these criteria for identification of the gifted and talented will encompass a minimum of three to five percent of the school population."[1] The above definition is the one adopted by the U. S. Office of Education for inclusion in the 1971 report to Congress. It is probably the most commonly used definition today. However, because of the nature of programming across the country, varying philosophies of education, legislative mandates, state and local policies, regulations and procedures governing program operation, there are legions of definitions. Throughout the remainder of this publication the word "gifted" will be used when referring to both gifted and talented.

[1]Marland Jr. S. P., *Education of the Gifted and Talented, Volume I: Report to Congress of the United States* p. IX

THE NEED FOR IN-SERVICE

The need for in-service education programs in the area of the gifted cannot be stressed too strongly. Professional literature in the areas of the gifted and in-service education, as well as experience and observations of past and present practices indicates that the need for in-service education grows out of the following reasons.

- Program implementation in the area of the gifted at both the state department of education and the local education and the local education agency level is a relatively new development.*
- Teacher preparation programs in the area of the gifted at either the undergraduate or the graduate level are limited in numbers.
- Few state departments of education require that teachers of the gifted have any pre-service background in the education of the gifted at either the undergraduate or graduate level prior to beginning work in the field.
- Pre-service preparation of both professional staff and teachers is usually considered to be a general introduction to education and rarely includes an introduction to the education of the gifted.
- Educational and social change makes some current professional materials, strategies, tools and knowledge obsolete or ineffective in a relatively short period of time.
- Coordination and articulation of any instructional program for the gifted and talented require changes in people, even when they are functioning at a highly professional level.
- In-service education programs aid in morale building and in providing teachers with new ideas to be used for instructional purposes.

* The reader should be aware that even though the field is comparatively new for most state and local agencies there is a large body of knowledge concerning gifted child education that can be utilized in developing in-service programs.

In-service education in the area of the gifted is necessary for all members of a professional staff, including regular classroom and special teachers, if differentiated instructional programming for the gifted is to be successful. The obvious reason, of course, is that education of the gifted is not the exclusive domain of the special teacher, but results only from the cooperative efforts of all professionals who come in contact with the gifted. Acquisition of new knowledge about human growth, development and learning as related to the gifted, development of new skills and strategies, production of new and differentiated instructional materials resulting from in-service education activities -- all of these activities should bring about improvement of instruction for the gifted through improved performance of those responsible for instruction.

MISTAKES IN PLANNING AND CONDUCTING IN-SERVICE

Professional literature on in-service education and the education of the gifted rarely deals with the mistakes made by educators in planning and conducting in-service activities. Yet, not all in-service programs are successful. Indications are, based on examination of professional literature, observation of and participation in in-service programs, reviews of evaluation forms for in-service meetings and informal discussions with in-service participants, that the mistakes made in conducting in-service education programs can be categorized under three general headings.

- Staff, teacher and program needs — Ben M. Harris and Wailand Bessent in their book, *In-Service Education*[2] suggest that the needs of teachers and other staff members should be central to all in-service efforts. The writers of this publication believe that program needs should be added. In most instances, the needs of the

[2]Harris, Ben M. and Bessent, Wailand, *In-Service Education* p.5.

three groups -- teachers, other staff and program -- are taken into consideration in planning and conducting in-service activities. However, there is evidence to indicate that some in-service programs are unsuccessful because they continue to be

- based on the interests of administrators and supervisors,
- planned and executed with little regard for individual difference,
- planned and executed with little regard for individual needs,
- based on hasty surveys of teacher interests not necessarily reflecting needs,
- planned and executed with little consideration to the question of evaluation,
- planned and conducted as an afterthought prior to the initiation of a new program.

- In-service staff, resources and content — The term "in-service staff" is used in this particular section to refer to two groups -- those responsible for planning and conducting in-service activities, and consultants employed to provide consultative services. In many instances, the failure to have a coordinator of in-service activities results in poorly executed plans. A second problem often seen with in-service staffs is that those brought in as specialists or consultants are not well-qualified in the field in which they are asked to work and often are unaware of the needs that exist at the local education level. A third problem focuses on the kinds of resources made available to in-service participants. Too often such resources, both human and material, are unrelated to participant and program needs. The fourth problem relates to the content of in-service meetings. Sometimes it is totally unrelated to teacher needs and levels of competency.
- In-service program format — In many instances, in-service programs take on stereotyped formats such as a presentation followed by questions from the audience or possibly an audiovisual presentation. There seems, in some instances, to be little consideration given to changing the format normally used for in-service activities. A later chapter in this publication will discuss planning and selecting in-service formats and designs or strategies for varying programming.

IN-SERVICE AS A CHANGE AGENT

As stated earlier in this chapter, one of the functions of in-service education is to serve as a planned process through which a local education agency can effect change in teacher behaviors and attitudes as well as changes in instructional programming for students. The administrative and supervisory staff of a local education agency has the responsibility of providing the ways and means to enable change, thus making the agency as a whole a better performer. In-service education, well planned and executed, can be the major vehicle used by an agency to effect desirable changes as well as to maintain a high level of performance. The acquisition of knowledge and the development of skills through in-service programs must be followed by action on the part of in-service participants if in-service is to be an effective change agent. Recognition of this fact by administrative and supervisory staff and by teachers will enhance the effectiveness of in-service education.

Guiding Principles for In-Service Education

This section has a very distinct purpose. It is to outline for the reader 12 principles that may serve as guidelines for educational planning. These principles should assist educators in planning, organizing and implementing in-service education programs in the area of the gifted. They were formulated following visits to a variety of in-service education programs, a review of professional literature on the education of the gifted and in-service teacher education, consultation with leading authorities in the education of the gifted and a review of evaluation forms from conferences and in-service sessions.

PRINCIPLE I: THE QUALITY OF IN-SERVICE IN THE AREA OF THE GIFTED IS DEPENDENT UPON EFFECTIVE LEADERSHIP AND COORDINATION.

One of the keys to successful and meaningful in-service education programs in the area of the gifted is quality of the support and leadership given by the administrative and supervisory staff of local education agencies. Their roles, in turn, are affected by their concepts of the nature of in-service education and the psychology of change within individual groups. The importance of knowledgeable, competent and dynamic leadership cannot be stressed too much. In order to provide such leadership, administrative and supervisory staffs must

- recognize the need for in-service in the area of the gifted;
- assign the coordination of in-service education activities in the area of the gifted to a staff member who is knowledgeable in the education of the gifted and has the time to conduct responsibilities related to the task;
- create a climate that is conducive to and accepting of change and growth;
- serve as facilitators for planning, organizing and conducting in-service education programs;
- provide the encouragement needed for active involvement in in-service education programs;
- be willing to involve in planning, setting goals, identifying needs and evaluating results those persons who are to be most affected by in-service education programs and the resulting change;
- be knowledgeable of and willing to use a variety of in-service education activities;
- have an understanding of the psychology of change and procedures for bringing about change;
- have respect for human personality and faith in those to be affected by change;
- budget specifically for in-service

education dealing with the gifted;
- evaluate in-service education activities for possible revisions and updating.

PRINCIPLE II: IN-SERVICE EDUCATION SHOULD BE PLANNED AND BASED ON A NEEDS ASSESSMENT IN THE AREA OF THE GIFTED.

Earlier in this publication reference was made to the fact that one of the reasons in-service education programs are not always successful is that sometimes such programs are not based on adequate needs assessments, instead they are based on superficial and hastily conducted surveys. Determining the actual needs or problems to be investigated through in-service education is not an easy task. It is one that requires the thinking of many and an examination of existing educational programming. It may involve the examination of such questions as the following.

- Does the school's philosophy of education support differentiated programming for the gifted?
- Why should there be a special differentiated program for the gifted?
- What are the goals, objectives and outcomes expected for the agency, staff, teacher and student?
- How shall the gifted be defined?
- By what criteria shall the target population be identified?
- What is the scope of the problem? How many gifted are enrolled in the system?
- How effective is the present instructional program for the identified target population?
- What modifications or changes need to be made in the present program to make it better serve the needs of the identified population?
- What modifications or changes need to be made in the present program to make it better serve the needs of the identified population?
- What delivery models will best meet the needs of the identified population and can best be implemented by the educational agency?
- By what procedure shall a student be placed in a differentiated program?
- What research findings are available to assist in making decisions?
- What teacher skills will need to be developed to assist in bringing about change, improving instruction or operating a new program?
- What teacher competencies need to be developed?
- How shall program effectiveness be evaluated?

These questions are a sampling of those a planning committee must answer in a needs assessment. Rather than explore a series of questions leading to a determination of needs, a planning committee may wish to employ a needs assessment method such as the printed example which follows. Developed by Dr. Joseph Renzulli,* this instrument should assist local education agencies in examining the various facets of programming for the gifted that have direct bearing upon program development and operation. The approach to using such an instrument as the Renzulli *Needs Assessment System for Planning and Developing Programs for the Gifted and Talented* must be determined by the local agency. Individual completion of such instruments and compilation of the results will be the best procedure for some, while for others completion as a group or committee may be best.

* Used by permission.

A Needs Assessment System for Planning and Developing
Programs for the Gifted and Talented

Joseph S. Renzulli
Bureau of Educational Research
University of Connecticut

(JSR: 1975)

Planning Activities	Irrelevant 1	Unimportant 2	Marginal Importance 3	Average Importance 4	Moderate Importance 5	Most Important	Average	Rank	Type of Decision & Chief Decision Maker(s)	Time (E,M,L)	Delivery System Who will carry out this activity? How will it be carried out? Estimated cost?
1. Decide on curricular areas in which the program will focus.											
2. Develop an identification system.											
3. Review literature on programs for gifted and talented.											
4. Survey the community for agencies and facilities that might serve as resources.											
5. Prepare a proposed budget.											
6. Develop job specifications for program coordinator.											
7. Select a program coordinator.											
8. Obtain financial support from the board of education.											
9. Decide on which grade levels will be involved in the program.											
10. Formulate a statement of the philosophy of your program.											
11. Survey the extent and variety of gifted and talented students in our district.											
12. Develop a system for reporting to parents.											
13. Review literature on identification instruments.											
14. Decide on how many students the program will serve.											
15. Survey the community for potential resource persons.											
16. Establish an advisory committee.											
17. Develop a plan for program evaluation.											
18. Review literature on characteristics of gifted and talented.											
19. Decide on a pattern of organization or program prototype (i.e., special class on resource from independent study, etc.)											
20. Obtain space in one or more buildings.											

Planning Activities	Irrelevant 1	Unimportant 2	Marginal Importance 3	Average Importance 4	Moderate Important 5	Most Important	Average	Rank	Type or Decision & Chief Decision Maker(s)	Time (E, M, L)	Delivery System Who will carry out this activity? How will it be carried out? Estimated cost?
21. Establish a parents' group.											
22. Decide in which department or under which administrator the program will be located.											
23. Survey the faculty for potential resource persons.											
24. Obtain financial support from the state legislature.											
25. Develop awareness of need for a program on the part of the faculty.											
26. Review literature on history of gifted education.											
27. Develop job specifications for program teachers.											
28. Establish general goals and objectives.											
29. Obtain a Title III grant.											
30. Develop public awareness of need for a program.											
31. Formulate a definition of giftedness.											
32. Establish a planning committee.											
33. Review and select curricular materials.											
34. Obtain the services of a general consultant.											
35. Visit other programs.											
36. Decide on how much time students will spend in the program.											
37. Decide upon which type(s) of giftedness the program will focus.											
38. Survey the faculty for potential program personnel.											
39. Develop board of education awareness of the need for a program.											
40. Develop awareness of the need for a program on the part of the administrative staff.											
41.											
42.											
43.											
44.											
45.											

PRINCIPLE III: CLEARLY DEFINED OBJECTIVES FOR IN-SERVICE EDUCATION SHOULD BE FORMALIZED AND ANTICIPATED OUTCOMES ESTABLISHED.

The success of in-service programs can best be measured by evaluating well-defined objectives and formally stated expectations. In planning in-service education in the area of the gifted, both objectives and expected outcomes should be particular to the area of the gifted, they should not be so general that the role of gifted education becomes lost in the in-service process. Educational planners should keep in mind

- the exceptional abilities of the target population (gifted students),
- the anticipated social role the target population (gifted students) may assume as adults and the competencies teachers need to assist students assume such roles,
- the degree of differentiation needed in curricular adjustments for the gifted.

PRINCIPLE IV: IN-SERVICE SHOULD BE REQUIRED FOR THOSE WORKING DIRECTLY WITH THE GIFTED AS WELL AS FOR OTHER TEACHERS, ADMINISTRATORS AND/OR SUPERVISORS IN SUPPORT ROLES.

The fact that program implementation in the area of the gifted is relatively new, both at the state and local education agency level, makes in-service education an absolute must for everyone concerned with program development if program operation is to be successful. Administrative and supervisory staff must understand the ways in which instruction for the gifted differs from instruction for all students. In addition, they need to be aware of the various facets of differentiated program development and operation. The scarcity of teacher preparation programs in the education of the gifted at both the undergraduate and graduate levels makes it imperative that teachers of the gifted be involved in in-service education. The majority of teachers of the gifted have entered the field from other areas of education, further making retraining through in-service education programs necessary. In situations where mainstreaming and the use of a resource room and teacher are the delivery models for a special differentiated instructional program, it is most essential for the regular classroom teacher to be involved in planned in-service education programs in the education of the gifted. Only through such programs will the teacher understand the purposes of the special program and the resource teacher's role. Also through such a program, the teacher will learn to adjust instructional strategies as well as the curriculum so that the educational needs of the gifted, both cognitive and affective, are better met.

PRINCIPLE V: MOTIVATIONAL FORCES AFFECTING PARTICIPANTS SHOULD BE CONSIDERED IN PLANNING AND CONDUCTING IN-SERVICE.

The frequently heard comment that many educators are not interested in participating in in-service education programs may in some cases be justified. One reason for negative reactions to in-service may very well be that little gain accrues. Planners of in-service education must consider the motivations of participants, which may be related to such factors as

- timing,
- individual desire for improvement of teaching skills,
- relevance and practicality of activities,
- caliber of resource personnel,
- opportunities to use the information gained,
- certification requirements at both state and local levels,
- salary increments,
- implementation of new programs,
- financial support for in-service participants,
- prior notice of in-service program content,

- continuing education requirements at state and local levels.

Participation in in-service education must be based upon some form of motivation and potential personal satisfaction from improved skills and competencies.

PRINCIPLE VI: THE SEQUENCING OF IN-SERVICE ACTIVITIES AND THE AMOUNT OF TIME ALLOTTED TO THOSE ACTIVITIES SHOULD DEPEND UPON PROGRAM CONTENT, TARGET POPULATION, SELECTED IN-SERVICE MODEL, GOALS AND OBJECTIVES AND ANTICIPATED OUTCOMES.

The sequencing and timing of in-service education programs is one of the most pressing problems faced by educational planners. For such programs to be beneficial to the participant and to the local education agency, they must be appropriately scheduled.

The depth and purposes of the content to be introduced during an in-service program become major factors in scheduling. If content is to be presented at the awareness level only, then one hour after school may not be poor time allotment. However, if material is to be presented at either the skill or production level, then one hour after school is insufficient. Teachers and other participants must be given sufficient time to become actively involved in the development of new skills and in the production of instructional materials.

A second item to be considered in determining the time and schedule for in-service activities is the people for whom in-service is planned. Such factors as the level of professional sophistication and experience of the target group play important roles in timing and scheduling. For some topics and groups, one hour is sufficient, while for other topics and groups, much more time is necessary.

A third factor that must be considered is the model or design a local education agency chooses for offering in-service. If the plan is to offer graduate courses on a university campus, timing will probably be to some degree determined by university policy. For example, a local agency may elect to have a college or university offer off-campus courses at a site convenient to teachers within small geographical regions. Should the agency select summer workshops, timing may be determined by the opening and closing of school or other local or state policies. Other models may indicate weekend classes or workshops, while still others may require timing adjusted to the individual rather than to a group.

One of the first and most difficult tasks planners of in-service programs face is to determine what is expected from the sessions. These outcomes have a direct effect upon the timing and scheduling of in-service education activities, and must be major considerations of early planning sessions.

Chapter three of this publication discusses a variety of in-service designs used by local education agencies throughout the country. Successful operation of some of these alternatives may require giving participants release time during the regular working day. Whether or not this is a practice generally accepted by an agency will depend upon program, content, target population, goals and objectives, anticipated outcomes and agency policies.

PRINCIPLE VII: AN APPROPRIATE DESIGN FOR INITIATING AND IMPLEMENTING IN-SERVICE EDUCATION SHOULD BE SELECTED.

In the first section of this publication the reasons why in-service education programs often are not successful were discussed. One of the reasons given was the failure of educational planners to purposefully and effectively vary in-service activities. The most commonly employed designs or strategies seem to be the lecture followed by a question and answer period and the large group presentation followed by small group discussions. In selecting models or designs, planners should take into consideration

- purposes for which in-service is being offered,

- anticipated outcomes,
- time at which in-service will be scheduled,
- resources to be made available.

Diversity and flexibility should be key components of in-service programs at either the local or state education agency level. A variety of approaches to the solution of a problem can increase productivity and improve instruction.

PRINCIPLE VIII: IN-SERVICE EDUCATION SHOULD INCLUDE OPPORTUNITIES FOR PARTICIPANTS TO BECOME INVOLVED IN INFORMAL INTERPERSONAL RELATIONSHIPS.

According to many conference participants, one of the greatest benefits of attending state, regional and national conferences or even one day in-service is the opportunity to talk with others in the same field. This seems to hold true in the area of the gifted. Because of the small number of gifted students enrolled in many school systems, there may be only one teacher of the gifted, thus there may be no one else with whom the teacher can successfully share concerns and ideas. The small number of teachers of the gifted in school systems or within geographical regions also makes it difficult conveniently to locate in-service education in the field. Opportunities to find out what others are doing and to share ideas can serve as morale builders and motivators for teachers. The authors encourage those responsible for planning in-service education to allow time for informal interpersonal relationships and incubation of new ideas.

PRINCIPLE IX: IN-SERVICE EDUCATION RESOURCES, HUMAN, MATERIAL AND FINANCIAL, SHOULD BE APPROPRIATELY SELECTED AND PROVIDED TO EFFECTIVELY PLAN AND MEET IN-SERVICE NEEDS.

Successful in-service in the area of the gifted should reflect three characteristics. Consultants should be used who are knowledgeable in education of the gifted or the in-service topic and who also can establish good rapport with participants. They may be from without or within the system; usually they are involved because of their expertise and their ability to serve as possible change agents. They should be well-informed, possessing in-depth knowledge about the area, about self and the dynamics of change. They should be flexible and adaptable to diverse situations when working with in-service groups.

Educational planners also are responsible to consultants for providing them with a clear understanding of the local education agency's objectives, problems, philosophy and channels of communication. Unless this is done consultants are often placed in embarrassing positions and maybe unable to share their expertise.

In almost every type of in-service education program in the area of the gifted, three kinds of resources are necessary. The selection and role of human resources has been discussed. Equally important, are the printed and audiovisual professional materials used by participants. In the area of the gifted such materials, especially printed, are unlimited. Careful screening is needed, with selections based upon

- objectives,
- content,
- requirements for participants,
- anticipated outcomes,
- participants' degree and level of content application.

A third necessary resource is funds. An adequate budget for in-service education should be available to educational planners and implementers. Sufficient funds should be included to provide competent human resources, release time for teachers, graduate fees and adequate professional materials. The in-service model selected will have some bearing upon the amount of funds needed.

PRINCIPLE X: THE SUCCESS OF IN-SERVICE EDUCATION IS DEPENDENT UPON THE PARTICIPANTS' DEGREE AND LEVEL OF CONTENT APPLICATION.

A comment sometimes heard after an in-service education session relates to the fact that content has been elementary and repetitious. Another frequent comment is, "Well, we heard nothing new." The planning and implementation of in-service activities to meet the needs of all staff members and teachers within a local education agency is a very difficult task, as needs are often unique to the person or to the school. To avoid repetition, elementary presentations, overworked topics and consultants, those responsible for in-service activities may wish to

- use a needs assessment instrument prior to planning in-service programs,
- survey staff and teachers to determine topics of interest to prospective participants,
- involve staff and teachers in planning, operating and evaluating in-service designs, strategies and resources,
- pre-test participants' knowledge and background.

PRINCIPLE XI: IN-SERVICE EDUCATION SHOULD INCLUDE AN EFFECTIVE MEANS OF EVALUATION.

Evaluation may be defined as a process by which it is determined whether or not an activity has been successful. If in-service education is to be effective, is essential and must be an integral part of the process. It can be the most essential step in planning for future in-service, since the truest evaluation lies in the quality of the program provided to gifted students and in the performance of teachers, students and staff. Evaluation and possible strategies will be further discussed in another section of this publication.

PRINCIPLE XII: IN-SERVICE TARGET AUDIENCES SHOULD BE EXPANDED TO INCLUDE PARENTS, COMMUNITY MEMBERS AND OTHER INDIVIDUALS WHO MAY BE PARTICIPANTS IN EDUCATION OF THE GIFTED.

Since the education of the gifted is not limited to a formal teacher-pupil relationship and since many other individuals are needed to implement the most meaningful education program for the gifted, it is appropriate for in-service activities to include such individuals as parents, community volunteers, resource personnel and other support individuals. The variety of delivery models an agency may use to provide services to gifted students makes it necessary for those who give direct services to have some background in the education of the gifted. Such involvement may aid in staffing special programs in rural areas.

The role of parents in the education of gifted children and youth is most important, for they are the first contributors to their children's education and to the development of their personal value patterns. Active and early involvement in most in-service activities can assist parents in understanding the nature and needs of their children and can aid them in becoming strong supporters of and involved participants in differentiated programming for the gifted.

One of the better known ways of broadening offerings to gifted students is to use the services of community resource people or services available through community agencies such as the public library. Representatives of these groups who work with gifted students need to understand their nature and needs as well as differentiated educational programming. As a result, they will be better able to work with gifted students and to share their knowledge, expertise and service. Such community members should participate in in-service programs on education of the gifted and help plan programs such as extended day activities staffed by volunteers, Exploration Quarter studies

or the Executive High School Internship program.

In-service education can focus on topics, understandings and skills needed by volunteers and problems unique to the use of both the services of the individual and the services of agencies. Well planned, organized and executive activities for parents, community members and others who provide direct services to students can do much to enhance the educational programs available to them.

Planning In-Service Education

It is generally accepted that pre- and in-service training are necessary if teachers and staff are to be successful in organizing and offering a differentiated educational program for gifted and talented children and youth. Unfortunately, too many innovative educational programs, including those for gifted and talented, are implemented with little or no teacher preparation; the result is lack of direction, loss of administrative support and failure to reinforce teacher initiative. Although some states currently have provisions for certifying teachers of the gifted, the problem still exists because all do not have such provisions. It should also be pointed out that certification is not an end in itself; on-going in-service education is essential.

In service education, as defined earlier in this publication, is a process of teaching instructional staff members to become better professional practitioners with resulting improved quality programming for the gifted and talented. Charlotte Malone, writing in the *Gifted Child Quarterly*, offers a comparable definition in referring to in-service education". . . as that which brings (to individuals, specific school sites, or to the total school district) greater knowledge and understanding of the field of specialization in the development of gifted youngsters."[1]

In-service education is a "people" activity that reflects new dimensions for teacher preparedness. As local education agencies initiate or expand programs for the gifted and talented, new expectations for job performance are also created. The degree of teacher/staff orientation, preparation and in-service provided or required by such local education agencies will significantly affect the quality of gifted programs. Exception has often been taken to the statement that "gifted children will make it on their own." If this statement is justifiably inaccurate, it can be inferred that teachers do and must play a vital role in the education of the gifted. It would not exaggerate the point to say that an agency's commitment to its gifted population can be accurately measured by one factor - adequate preparation of teachers who work with gifted children and youth.

Regardless of the definition used for in-service education, it serves little purpose unless there is an effective means of translating it into practice. A local education agency sensitive to the needs of the gifted and talented must recognize in-service education as essential and provide for it on a continuing basis.

[1]Charlotte Malone. "Implementing a Differential School Program for the Gifted," *The Gifted Child Quarterly*, Winter, 1976, p. 317.

AN IN-SERVICE PLANNING MODEL

Any program designed for teachers of the gifted should include a thorough explanation of the "basics" of gifted education, including nature and needs, methods of identification, materials and resources and techniques required to design and manage a program for such students. This type of understanding and preparation by teachers does not occur in and of itself, but must be carefully planned and coordinated over a period of time, in a variety of ways and by different combinations of groups or agencies.

Models abound in education, and the area of the gifted is no exception. The writers of this publication hope not to burden readers with yet another model. However, one failure of many in-service education programs stems from the absence of adequate, well-coordinated planning. When this occurs, preparing teachers of the gifted becomes at best, haphazard.

The planning model described below is intended to focus the reader's attention on the whole of in-service education in the area of the gifted by presenting a sequential, yet flexible planning framework.

The basic planning model as shown in Figure 4-1 contains the following dimensions.

- Planning Stage
- Identified Needs (topic)
- Design
- Strategies
- Resources
- Evaluation

The various dimensions are arranged in sequence from left to right across the top of the planning model. Each dimension represents an integral phase of a carefully planned in-service program.
Figure 4-1 also presents suggested items within each dimension of the planning model. The lists are not to be taken as comprehensive, but simply as suggestions that an agency might follow in developing in-service plans.

PLANNING MODEL DIMENSIONS

Planning Stage

This dimension should reflect the stage of planning or development of the gifted program by the school or local education agency. Other dimensions of the in-service model must of necessity relate directly to the "planning stage." For example, if the school or agency does not currently have a gifted program, the planning stage would most likely be that of "orientation" or "investigation and research" (See Figure 4-1). The "planning stage" simply represents the degree to which the school or local education agency has progressed in its efforts to provide for the gifted and talented.

Identified Need or Topic

Once the planning element has been determined, an appropriate need or topic for in-service purposes is selected. The designation "appropriate" must be emphasized, for any in-service program should be planned only after a carefully evaluated needs assessment (See Renzulli's example, page -). Whatever topic is selected, it should be restrictive enough to allow for adequate attention during the in-service program. For example, to announce that the in-service topic will be "Gifted and Talented" represents too broad a selection. Sample topics or potential needs listed in Figure 4-1 are more definitive.

Level of Participant

In planning for an in-service program, the developmental level of the participants must be considered. It would be of little value to schedule a curriculum development workshop for teachers of the gifted if those teachers had not previously participated in a workshop designed to develop curriculum writing skills. Conversely, a general, awareness-level workshop on characteristics of gifted children would most likely be inappropriate for experienced teachers of the gifted.

FIGURE 4-1
DIMENSIONS OF IN-SERVICE PLANNING MODEL

Planning Stage	Identified Need	Participant Level		In-service Design	Strategies	Resources	Evaluation
		Teacher	Other				
1. Orientation 2. Investigation and Research 3. Program Planning and Development 4. Student Identification 5. Teacher Training 6. Program Implementation 7. Evaluation 8. Program Expension	1. Philosophy and need for program 2. Special needs and types of giftedness 3. Characteristics of gifted/talented 4. Societal values relative to program 5. Development of a written plan 6. Components of a program 7. Determination of program prototypes 8. Organization of the teacher-learning experience 9. Traditional vs. differentiated curriculum 10. Materials selection and the gifted 11. Enrichment and acceleration for the gifted 12. Student involvement in program planning 13. Program facilities 14. Program coordination and supervision 15. Role of regular classroom teacher 16. Creativity and the gifted 17. Independent study and the gifted 18. Programming for culturally different gifted 19. Selection and training of personnel 20. The teacher as counselor 21. Affective education for gifted 22. Self-concept and the gifted 23. Screening and selection of students 24. Record keeping and reporting 25. Parent-family role and the gifted 26. Student evaluation and performance 27. Evaluating teacher effectiveness	1. Awareness 2. Skill Development 3. Production 4. Dissemination 5. Updating		1. National or regional conference 2. Statewide conferences 3. Multi-system workshops 4. Systemwide workshops A. Faculty meetings B. Saturday C. Release-time D. Summer E. Graduate level coursework F. ETV courses G. Mini-internship H. Preschool 5. Individual school level 6. Independent study 7. Visitation (inter and intra-system)	1. Lecture 2. Dialogue session 3. Program observation 4. Simulation 5. Role playing 6. Demonstration teaching 7. Conducting research 8. Brainstorming 9. Decision-making 10. Small or large group sessions 11. Unit plan design or curriculum development 12. Review of case studies 13. Displays 14. Seminars 15. Task force development 16. Creativity development 17. Problem solving 18. Laboratory work 19. Critique of teaching strategies 20. Audio visual production	1. Consultants 2. Video tapes 3. Film 4. In-service kits 5. Core library 6. Records or tapes 7. Model programs 8. Professionsl publications 9. Slide-tape presentations 10. Teachers of gifted 11. Sample unit plans 12. Gifted students 13. State guidelines for gifted 14. Sample identification forms and procedures 15. Learning theory models 16. Professional organizations 17. Colleges and universities 18. State department of education 19. Museums 20. Community resource people 21. Sample evaluation forms 22. Video tape equipment	1. Questionnaire 2. Observation checklists 3. Personal interviews 4. Rating form 5. Oral critique 6. Inventories 7. Follow-up observation of teachers 8. Product completion

DATE _____ TIME _____ TASK ASSIGNMENTS (Personnel) _____

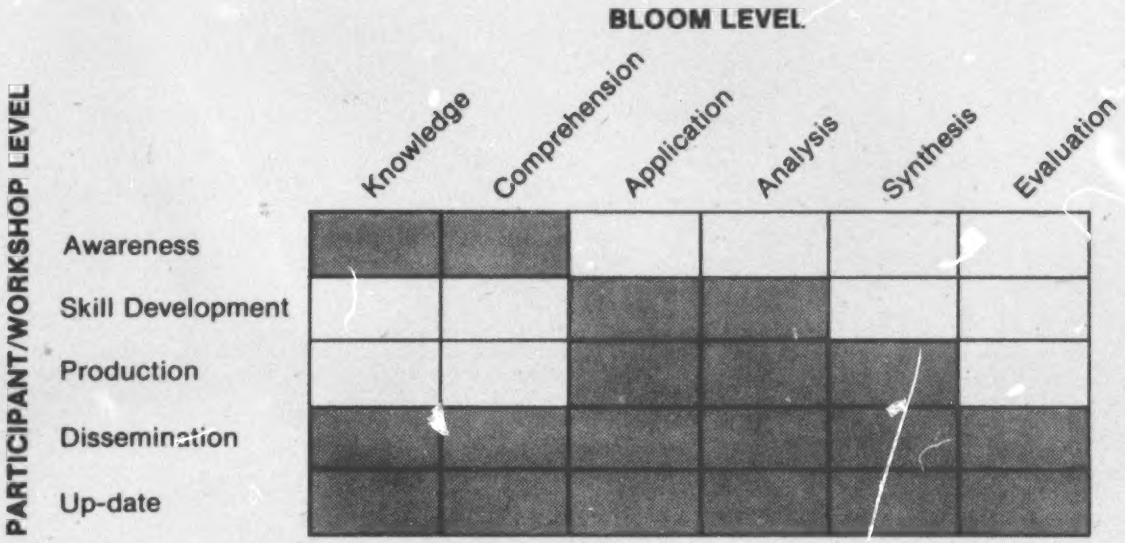
_____ _____ _____

_____ _____ _____

_____ _____ _____

Figure 4-2 depicts participant level through a comparison of in-service with the various levels of Bloom's Taxonomy of the Cognitive Domain.[2] The levels of Bloom can be equated with the type of skills to be developed in inservice workshops.

FIGURE 4-2
WORKSHOP CATEGORIES AND THE COGNITIVE DOMAIN



An "awareness" level workshop would be designed to provide basic *knowledge* on a topic with emphasis on *comprehension.*

A "skill development" workshop would stress the *application* and *analysis* of information received during awareness-level workshops.

"Production" workshops would encourage the development of specific products, such as lesson plans, activities or other curricular experiences. In-service participants would be required to function at higher cognitive levels, such as *applying, analyzing* and *synthesizing* information as depicted in Bloom's Taxonomy.

Workshops may also be classified as "dissemination" and "up-dating" types, the former a sharing and exchange of information or products previously acquired or developed. "Updating" workshops include strengthening or expanding skills or knowledge from previous workshops and thus, along with dissemination workshops, may include all levels of Bloom's Taxonomy to one degree or another.

Figure 4-3 may aid the reader in understanding the relationships just discussed.

[2]Benjamin S. Bloom (ed.). *Taxonomy of Educational Objectives, Handbook I: Cognitive Domain.* New York, David McKay Co., Inc., 1956.

FIGURE 4-3

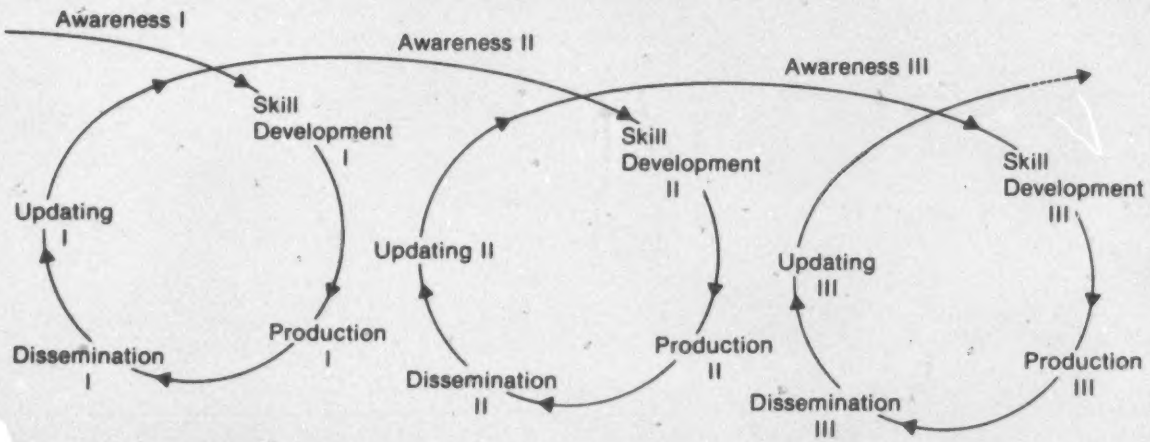
UTILIZING BLOOM'S TAXONOMY IN DEVELOPING CURRICULUM

WORKSHOP/PARTICIPANT LEVEL	COGNITIVE LEVEL	ACTIVITY
1. Awareness	Knowledge Comprehension	A. Overview of Bloom's Taxonomy
2. Skill Development	Application	A. Discussion of curricular activities and the particular levels of Bloom each represents
3. Production	Analysis Synthesis	A. Development of curricular activities utilizing Bloom's Taxonomy
4. Dissemination	All levels	A. Sharing and evaluating activities developed utilizing Bloom's Taxonomy
5. Updating	All levels	A. Presenting new or additional information leading to the development or refinement of curriculum activities

Figure 4-4 depicts the continuous spiral of in-service, in this case relating to the education of the gifted. The reader should note that in-service is a continuous process, with various stages of awareness, skill development, etc.

FIGURE 4-4

Continuous Spiral of In-Service Education
Gifted/Talented



Design

As discussed in a previous section of this publication, one of the guiding principles of in-service education in the area of the gifted is to select an appropriate design for the in-service program. In-service programs often have minimal effect because the selected design is inappropriate for the topic or purpose to be considered.

In planning the in-service program, the content to be presented must be considered as well as the degree of participant involvement necessary for the session to be profitable. This is not to say that such in-service designs as faculty meetings or end-of-the-day workshops are ineffective. Many awareness level presentations can be scheduled at such times. However, skill development or production level workshops are best planned for more appropriate times when participants can more fully devote their mental and physical capabilities. Such workshop designs as released-time, Saturday, or summer sessions may provide more meaningful results. Suggested designs are presented in Figure 4-1 and are discussed in more detail in a subsequent section of this chapter.

Strategies and Resources

These dimensions of the planning model relate to the instructional methods and human or material resources necessary to conduct the in-service program; they are essential to the planning and success of the in-service program as they relate to the teachers' immediate situation -- the classroom. Carefully selected strategies and resources enhance the involvement of participants in the in-service activity. As the reader will note in Figure 4-1, there are many strategies and resources from which to select. Although a variety of strategies and resources is recommended, the priority for selection should be directly related to the content of the in-service itself. Lecture followed by group discussion is obviously overused as a strategy, but at times this may still be the best approach. On the other hand, it may also be effective to engage in-service participants in the same activities they will ultimately use in the classroom. Participating in a learning experience from the students' viewpoint often aids in clarification and understanding. The reader should be cautioned, however, that providing variety just for the sake of variety may fail to accomplish the identified need of the in-service program.

Evaluation

In-service education should be planned to include an effective means of evaluation. Charlotte Malone points out that two basic questions serve as criteria for evaluating in-service education in the area of the gifted.

"(1) Do the in-service activities pertain to specialization of preparation needed by teachers of the gifted?
(2) Do the activities improve understanding and effectiveness when working with gifted?"[3]

Although several evaluation methods which might incorporate the above criteria are listed in Figure 4-1, it is suggested that the reader refer to Dr. Joseph Renzulli's recently published handbook on evaluating programs for the gifted to obtain more depth and appropriate examples. Renzulli provides a comprehensive overview with many practical suggestions for evaluation and has designed the handbook for various audiences.

- Would-be field evaluator
- Program people or personnel
- Policy makers
- State consultants for the gifted
- Professional evaluators[4]

Although Renzulli's guidebook deals primarily with the topic of program evaluation, many of the references, models and

[3]Charlotte Malone. "Implementing a Differential School Program for the Gifted, *The Gifted Child Quarterly*, Winter, 1976, p. 232.

[4]Joseph Renzulli. *A Guidebook for Evaluating Programs for the Gifted/Talented.* National Leadership Training institute on the Gifted and Talented. Ventura. 1975.

elaboration will have application to on-going in-service efforts.

The planning model is purposely presented in general terms. Particularly in discussing the dimensions of strategies, resources and evaluation, it would be beyond the scope of this publication to go into extended detail. The writers have intended simply to present a basic planning approach from which in-service activities in the area of the gifted might be developed.

In summary, the reader may wish to refer to Figure 4-5 for one example of a planned in-service program using the planning model. The planning model may be adapted to record information relative to a series of in-service sessions, depending on the degree of detail the planner wishes to include. Figure 4-5 in no way suggests a comprehensive in-service program, but it is hoped the example will stimulate more careful planning.

COMPREHENSIVE IN-SERVICE PLAN

In developing a comprehensive plan for in-service education in the area of the gifted, local education agency personnel should consider each of the following as essential components.

- National and regional conferences
- Professional publications
- Statewide conferences, workshops or seminars
- Multi-systems workshops
- Individual school level workshops
- Independent or individualized study
- Program visitation

National and Regional Conferences

Renewed interest over the past five years in the area of the gifted has given rise to increased emphasis on the subject at various national and regional conferences. The Council for Exceptional Children (CEC) and specifically one of its divisions, The Association for the Gifted (TAG), offer excellent exposure to gifted education for in-service purposes during their annual convention. Other such conferences are also sponsored each year through the National Association of Gifted Children (NAGC) and the National/State Leadership Training Institute on the Gifted and Talented.

These national organizations, through their respective conferences, bring together the theoretical and practical and represent an excellent opportunity for input and exchange with leading consultants and local level practitioners. In-service education budgets should include provisions for local education agency representatives to attend national or regional conferences for personal and professional growth to obtain ideas and information or make personal contacts that will lead to future on-site in-service sessions.

The potential of national and regional conferences on the gifted should be tapped. The additional cost required for this type in-service can be justified if information obtained is converted into in-service opportunities for a broader local audience.

Professional Publications

The national organizations mentioned above, in addition to their emphasis on gifted education in conference settings, also publish journals or bulletins on a regular basis.

- *Exceptional Children,* published monthly (September-May, except December) by CEC
- *Teaching Exceptional Children,* published quarterly by CEC
- *The Gifted Child Quarterly,* published quarterly by NAGC
- *The LTI Bulletin,* published monthly by the National/State Leadership Training Institute on the Gifted/Talented
- *Talents and Gifts,* published four times per academic year by TAG, division of CEC

The Council for Exceptional Children also provides information on gifted and talented education through the education Resource Information Center (ERIC)

FIGURE 4-5
DIMENSIONS OF IN-SERVICE PLANNING MODEL

Planning Stage	Identified Need	Participant Level		In-Service Design	Strategies	Resources	Evaluation
		Teacher	Other				
1. Orientation	Needs of the gifted and talented	Awareness	Administrators: Awareness	Released time workshop April 8	1. Lecture 2. Interaction session 3. Decision-making	1. State department of education consultant 2. Film (Specify) 3. State guidelines for gifted	Oral evaluation and critique
2. Identification	Screening and selection of students	Skill development	Counselor: skill development	Saturday workshop May 8	1. Stimulation on identification 2. Interaction session 3. Case study examination 4. Decision making	1. Simulation activity 2. Sample case studies, forms, and procedures 3. Professional books	Questionnaire
3. Program Design	Teaching/learning theory models	Production		Summer workshop July 13-15	1. Lecture 2. Demonstration teaching 3. Unit plan design and curriculum development	1. Teacher of gifted (another district) 2. Sample unit plans 3. Teaching-learning models 4. Instructional materials	Product completion

	DATE	TIME	TASK ASSIGNMENTS (Personnel)
1.	April 8	1:00 p.m. – 3:00 p.m.	Coordinator of instruction will plan in-service sessions, providing for proper selection
2.	May 9	9:00 a.m. – 12:00 noon	and notification of participants.
3.	July 13-15	9:00 a.m. – 3:00 p.m. each day	

Clearinghouse on Handicapped and Gifted. Much of this literature is unavailable from commercial sources. It is gathered from colleges and universities, state, local and federal agencies and special projects. In addition, the clearinghouse maintains 20,000 citations in the Exceptional Child Education Abstracts file, with 3,000 abstracts added annually. The clearinghouse produces manuals and surveys in the following areas of gifted and talented education: bibliographies, literature, circular material, exemplary programs and practices and human resources. Special products are issued annually in areas of special interest to educators of gifted and talented children.

Clearinghouse information services are directed to teachers, students, administrators, teacher educators, directors and researchers. This comprehensive information source is appropriate to preparing theses, comparing curricula, classroom techniques, identifying innovative programs, gaining awareness on related research, understanding a child's exceptionalities and identifying replicative model programs.

Three information retrieval services are offered by the clearinghouse -- custom computer searches, topical bibliographies and abstracts. The quarterly, *Exceptional Child Education Abstracts,* a useful reference to guide and coordinate research in every aspect of education for handicapped and gifted children, is available through the clearinghouse. Through the computer searches, the most current information on a specialized topic is analyzed and edited by an information specialist. The topical bibliographies, which are updated annually, reprinted and stocked for mailing, include "Gifted and Talented Research," "Gifted Children and the Arts and Humanities," "Gifted - General Reading List," "Gifted - Handicapped, Disadvantaged and Underachievers," "Identification of the Gifted," "Mathematics and Science for Gifted Children," "Programming for the Gifted" and "Creativity."

The clearinghouse has worked cooperatively since 1972 with the U. S. Office of Education's Office of Gifted and Talented and other organizations to plan the development and distribution of information and products which will aid persons with an interest in gifted and talented education. The clearinghouse is funded by a grant to the Council for Exceptional Children from the National Institute of Education.[5]

Statewide Conferences

Statewide conferences on the gifted have many of the same advantages as national and regional ones, but even greater appeal because of the reduced travel expense, less time away from home, and, in many cases, informative sessions of more immediate relevance. It has been only recently that more states have planned and conducted statewide conferences on the gifted or included them as a part of state federations for exceptional children. Such conferences serve not only as a means of in-service for local education agency staff and teachers, but also as a stimulus to program development. Although not every state has such a conference each year, most states that do would encourage participants from other states to attend.

Multi-System

Some states such as Georgia are fortunate to have regional learning resource centers within their states that function in a support role by providing in-service opportunities for teachers of the gifted and other exceptionalities on a multi-system basis. This is an effective approach, in that unlike national, regional or state conferences, the learning resource center can provide in-service based on more specific identified needs or interests at the local education level.

[5]"Fact Sheet," ERIC Clearinghouse on Handicapped and Gifted, Council for Exceptional Children, Reston, Virginia.

Systemwide or School Level

Systemwide or school level in-service should be provided for general and specific target groups such as teachers of the gifted or to total school faculties in need of awareness-level information in the area of the gifted. Systemwide in-service must be carefully planned and coordinated and may take on many forms, such as

- school building faculty meetings,
- graduate level course work,
- summer, preschool or Saturday workshops,
- released-time activities,
- workshops via ETV,
- regularly scheduled planning days.

The content of systemwide or school level in-service in the area of the gifted should represent a balance between theory and practical application. The *Idaho State Guidelines for Gifted and Talented Programs* recommend the following types of workshops.

- Theory, psychology and research workshops which will provide an opportunity to expand knowledge about Gifted/Talented programs and the underlying psychological and research basis for the programs.
- Material workshops which provide an opportunity for teachers to investigate varying kinds of materials and equipment that might be particularly suited to Gifted/Talented students.
- Teaching strategy workshops which give opportunities to investigate various qualitatively differentiated teaching strategies, different approaches, and different experiences for students."[6]

Independent or Individualized Study

Local education agencies should encourage teachers of the gifted to pursue independent or individualized study to upgrade skills in working with the gifted or talented. Graduate course work, professional reading, experimental and innovative curriculum development, travel, proposal writing and community involvement relative to the gifted are all alternatives. It is hoped that these suggestions will not become "the" method of in-service for teachers of the gifted, but will add to involvement or participation in other forms of in-service described earlier.

Visitations

Local education agencies should also provide opportunities for staff personnel and current or prospective teachers of the gifted to visit programs in other locations. Although a cost factor is involved, it is often justified if new approaches, techniques or ideas are observed that are adaptable to a local situation. This approach is very practical for local education agencies which are in the early stages of planning and development.

Specialized training for staff and teachers who work with gifted children and youth should not stop at the pre-service level. On-going in-service training is a must if programs are to expand and improve. It is hoped the preceding suggestions will stimulate more effective planning.

[6] *Guidelines for Gifted/Talented Programs.* Idaho Department of Public Instruction. 1975.

Characteristics and Competencies of Teachers of the Gifted as They Relate to In-Service Training

As it now stands, there is no clear, research-supported explanation of the specific teaching acts and/or teacher characteristics that achieve learning among gifted children. Support for this statement is found in the background component of Shirley R. McNary's 1967 study, *The Relationships Between Certain Teacher Characteristics and Achievement and Creativity of Gifted Elementary School Students*, in which she says ". . . In a survey of the literature no research was discovered regarding the qualifications necessary for teachers of gifted elementary children. . . There is much in the literature describing the attributes that can logically be assumed as necessary for teachers working with gifted classes. However, there is a dearth of empirical data proving specifically what is important and desirable."[1]

Review of the literature and more recent expert opinion seem to give credence to the idea that there do exist basic teacher characteristic that are important to success in education of the gifted. These include high intellect, enthusiasm for learning and the desire to share this enthusiasm and knowledge. It must be remembered, however, that these traits generalized, and each may or may not hold true for all areas of gifted/talented as defined by the U.S. Office of Education.

Research from Shirley McNary's study indicates ". . . that teacher characteristics do significantly influence the growth of fourth, fifth and sixth grade self-contained classes with a mean I.Q. of 120 or better. However, there was no single teacher characteristic that was significantly related to all areas of convergent and divergent growth in students."[2]

William Bishop's study of the characteristics of successful high school teachers, as identified by intellectually gifted students, lists the following criteria: intellectual superiority; personal interests and activities that lean toward areas recognized as more intellectual in nature; evidence of high achievement in past scholastic endeavors, as well as current; thorough command of subject matter and a desire to share enthusiasm for knowledge of the same; sensitivity to others; acceptance of superior students; responsible, stimulating, imaginative, business-

[1]Final Report, *The Relationship Between Certain Teacher Characteristics and Achievement and Creativity of Gifted Elementary Students*. Bureau of Research, Office of Education. Project No. S-348, April 30, 1967, pp 1-2.

[2]Ibid., p. 16.

like and systematic teaching procedures; ability to communicate effectively with students; and personal interest in students.[3] The reader is again reminded that these characteristics may or may not hold true for all areas of the definition.

Marvin Gold quotes James Gallagher as saying ". . . the teacher of the gifted seems to be required to have every human virtue save economic sense because, if he possessed that also, he certainly would not be found in education."[4] Gold also reports that Leonard Lucito has offered an opinion on a way of looking at the distinguished characteristics of the teacher of the gifted in that ". . . He (Lucito) opines that it isn't such factors as 'has a good sense of humor' but 'what is the nature of the sense of humor' for a teacher of the gifted."[5]

Further opinion on this subject was given by Gold in the paper "Preparation of Teachers of Gifted/Talented (G/T) Youngsters" for the National/State Leadership Training Institute for Gifted/Talented in 1974. He wrote of *exiting* vs. *entering* characteristics, behaviors and competencies. Essential entering characteristics cited by Gold are the high ability level of the teacher and ego-strength to work with gifted students.[6] These characteristics are not areas that can be greatly enhanced through any amount of in-service, for they are either present in the individual so selected as a teacher of the gifted or they are not, the latter being true to the detriment of a program. Recognizing that these, and other traits that fit the category of entering characteristics, may well not be possible to develop through in-service, the planner of in-service experiences for personnel who work with gifted and talented students would do well to turn his/her energies to those areas that *are* appropriate for in-service after having carefully selected the teacher.

E. Paul Torrence and R. E. Myers state that ". . . we readily concede that there are undoubtedly certain characteristics common to all really effective teachers. Moreover, we feel that if these characteristics could be identified, they would provide useful guides in the process of becoming a better, more creative teacher."[7] After administering the Ideal Teacher Checklist to several hundred students ranging from elementary school to college level of study, Torrence and Myers further reported the following five characteristics of teachers upon which there was the most agreement as being very important.

- Enjoys being with young people
- Thinks all of his pupils are important individuals
- Is eager to help when I need it
- Will admit his mistakes
- Trusts his pupils"[8]

It should be noted that these same students showed agreement in ranking "is intellectually brilliant" among those characteristics considered "not very important."[9] Although one should perhaps be wary of this reaction to the lack of need for intellectual ability, there is again the possibility of taking these and other characteristics from this study and using them as suggested by the authors -- as ". . . useful guides in the process of becoming a better teacher."[10]

Appropriate training for competencies/skills might be presented at the formal pre-service (college level) training period or, for those without formal pre-service training, at an in-service period prior to entering the classroom with gifted and

[3]Bishop, William. *Successful Teachers of the Gifted*. Unpublished Doctoral Dissertation, Kent State University.

[4]Gold, Marvin. *Preparation of Teachers for Gifted and Talented Youngsters*. Speech delivered at The National State Leadership Training Institute, July, 1974.

[5]Ibid.

[6]Ibid.

[7]Torrence, E. Paul and Myers, R. E. *Creative Learning and Teaching*. New York: Dodd, Mead and Company, 1973. p. 309.

[8]Ibid., p. 314.

[9]Ibid., p. 314.

[10]Ibid., p. 309.

talented students. The co-authors, after gleaning the literature, identified the following list of competencies that are considered to effect growth or change.

- Knowledge of literature, terminology, characteristics and definitions related to the field of gifted child education
- Techniques to identify gifted students using a multi-criteria approach and including interpretations of various assessment instruments
- Techniques to communicate to parents, administrators and other teachers the need to serve the gifted student with special programs
- The ability to compare and contrast the various administrative models for serving the gifted student
- The various teaching strategies found most successful with the gifted
- Ability to assess various teaching techniques and to modify these as necessary

In addition to the teacher of the gifted, any other person having continuing contact with the target population (gifted) should also have the basic knowledge or competencies to provide a more comprehensive and unified program. If the program lacks unity of purpose it is likely that 1) the teacher's instructional techniques may not be approved by the principal, supervisor or superintendent; 2) often needed administrative models and materials for instruction will be rejected because of cost, etc.; 3) the need for specialized equipment and appropriate facilities may not be recognized; 4) other teachers will not understand the importance and necessity of their cooperation; 5) parents will not understand the need to support a special and often different type of curriculum and program.

Once there is recognition of the need to plan in-service for all persons who contribute to the gifted education program, additional planning becomes a requirement for producing the proper learning experience. The proper experience will be determined according to the role an individual fulfills in a school or system, i.e., administrative personnel (principal, superintendent, etc.), school psychologist, guidance counselor, other teachers. There will also be times when parents, mentors or other community persons should be included. Although the success of the program may well depend upon the "entry" attitudes/characteristics, as is true with teachers, there are likewise areas of in-service conducive to individual growth in understanding a special program of education for the gifted. Indeed, the first in-service for administrators should give them the minimal background necessary to understand the needs of gifted/talented children and should aid administrators in establishing the first steps of program implementation. Depending upon the role the adjunct person may play, in-service activities could include (but not be limited to) the following.

- Presentation of facts explaining rationale of a special type program for the gifted, including cost factor, scheduling, etc.
- Study of techniques for counseling gifted students regarding personal as well as career education goals
- Study of identification techniques, beginning with role of individual in referral through techniques of testing
- Presentation of information parents need to fulfill their potential role in identifying and rearing gifted children
- Presentation of information needed by mentors and other community support persons who may not be as familiar as they should be with educational policies, programs and administrative structure

As Gold says ". . . there probably is no panacea for training efforts. Quibbling about the most efficacious approach does not begin to meet the fantastic needs relative to preparation of professionals to work with gifted/talented youth."[11] Of course, this is not to say that an all-out

[11]Gold, Marvin. *Preparation of Teachers for Gifted and Talented Youngsters.* Speech delivered at The National/State Leadership Training Institute, July, 1974, p. 6.

effort of training should not be carefully designed and implemented by means of in-service. Indeed, this may be the means by which needs are met if inservice can be planned to meet the specific and identified needs of a particular population."

In conclusion Gold says, ". . . Perhaps an analogy with modes of transportation is in order. Sometimes a car is needed; sometimes, a plane and sometimes an ocean-going vessel. But there are times when a silly looking mule is most appropriate to get a particular job done. One school system may be in need of the auto whereas another could benefit from the mule. Let us not get bogged down in looking for *the* way to travel when we all want to get to the same place anyway: the best education for gifted/talented youngsters!!"[12]

[12]Ibid., p. 6.

Selected References

The introductory section of this publication states it is written for educational practitioners — those people within a local education agency responsible for planning, organizing and implementing in-service education activities in the area of the gifted. The writers felt that to delineate content for in-service without knowing local agency and teacher needs would be a mistake. Therefore, they discussed the need for in-service education, mistakes often made in conducting in-service, terminology, teacher and staff competencies and principles governing in-service education. Each of these areas has direct bearing upon the quality and effectiveness of any in-service education program centered on education of the gifted.

The sixth purpose of this publication is to provide a suggested list of professional materials, both print and non print, that can be used for in-service sessions in the education of the gifted. The list given here must be considered as only a beginning, for there are numerous professional books and pamphlets dealing with the gifted.

PRINTED MATERIALS

Books

1. Barbe, Walter B. and Renzulli, Joseph S., (editors) *Psychology and Education of the Gifted,* second edition. New York: Irvington Publishers, 1975.

This is a collection of papers and articles by outstanding leaders in the education of the gifted. The papers span the time from 1920 to 1976 and trace the development of thinking in American education toward the gifted. Authors include Terman, Witty, Gallagher, Hollingsworth, Newland, Covant, Barbe, Torrance and many others. This publication has great value, both as a reference book or text and as interesting reading for those involved with gifted education.

2. Beggs III, David W., and Buffie, Edward G., (editors) *Independent Study - Bold New Venture.* Bloomington: Indiana University Press, 1969.

This publication, in addition to discussing theory, gives practical suggestions by practitioners for introducing and operating independent study programs in both elementary and secondary schools.

3. Bloom, Benjamin (editor) *Taxonomy of Educational Objectives. Handbook I: Cognitive Domain.* New York: David McKay Company, Inc., 1961.

This handbook describes a classification model for determining educational objectives for the cognitive domain. It is recommended for educational planners and implementers.

4. Brandwein, Paul F., *The Gifted Child as a Future Scientist.* New York: Harcourt Brace and Co., 1955.
This is a report by the chairman of the science department of the Forest Hills High School describing the program used there for the identification and development of students gifted in science. Proposals are included for local and national programs and a discussion is given the problem of selecting and training teachers for work with gifted children.

5. Bridges, Sydney, *Problems of the Gifted Child I.Q. 150.* New York: Crane, Russak and Co., Inc., 1973.
This publication is a practical handbook for both teachers and parents of gifted children. Although the title may indicate it is restricted to highly gifted children, the information is relevant to all children of superior intelligence.

6. Brumbaugh, Florence N. and Bernard, Roscho, *Your Gifted Child.* New York: Henry Holt and Co., inc., 1958.
An easily read book especially for parents who wish to help their child realize his full potential in an atmosphere of understanding and love. Such vital questions as these are discussed: Should I teach my child to read? Should my child be sent to nursery school? How can I induce my child to study?

7. Burt, Cyril, *The Gifted Child.* New York: John Wiley and Sons, 1975.
Prepared by Dr. Cyril Burt prior to his death, the book gives an introduction to the gifted child, his characteristics and problems. It is designed for the teacher at either the pre-service or in-service level.

8. Cushenberry, Donald F., *Reading and the Gifted Child: A Guide for Teachers.* Springfield: Charles C. Thomas, 1974.
This is an excellent publication which includes suggestions for identification, evaluation and teaching strategies for gifted children. It is of practical use to teachers.

9. Cutts, Norman E., and Moseley, Nicholas, *Bright Children: A Guide for Parents.* New York; Putnam Sons, 1953.
This book is written primarily for parents, but it may also prove a valuable aid to teachers working with parents of gifted children. The author's discussion on the gifted child in the home and school and the relationship between the two is very good. Suggested guides for identification and guidance for both parents and the school are given.

10. Cutts, Norman E., and Moseley, Nicholas, *Teaching the Bright and Gifted.* Englewood Cliffs: Prentice Hall, Inc., 1957.
An enjoyable and easily read book covering every aspect of the gifted child. Emphasis is placed on ways of identifying the child, his needs, various school programs, mental hygiene, guidance and the underachiever.

11. Delp, Jeanne L., and Martinson, Ruth A., *The Gifted and Talented: A Handbook for Parents.* Ventura: National/State Leadership Training Institute, 1975.
This is a readable and practical handbook specifically for parents. The role of parent organizations, identification of the gifted and causes of neglect of gifted children are some of the topics discussed.

12. Department of Public Instruction, Idaho, *Guidelines for Gifted/Talented Programs.* 1976.
These are policies concerning the gifted that have been approved by the Idaho Board of Education.

13. Dickinson, Ritha M., *Caring for the Gifted.* North Quincy: The Christopher Publishing House, 1970.
This book is easily read and enjoyable for

everyone. Parents will find in it useful guides for working with the gifted; teachers also will find ideas they can use.

14. Dunn, Rita and Dunn, Kenneth, *Practical Approaches to Individualizing Instruction.* West Nyack: Parker Publishing Co., 1971.

This publication gives help for individualizing instruction. Content includes discussions of such topics as developing a dynamic program for improving teaching and learning, how to begin an individualized instruction program, using group process techniques, simulations and role playing and brainstorming techniques.

15. Durr, William K., *The Gifted Student.* New York: Oxford University Press, 1964.

Throughout this book the emphasis is on specific suggestions for educational techniques and school programs that enable the gifted student fully to develop his/her abilities. Administrators, guidance workers and parents will also find suggestions to help them continue their own responsibilities for the full development of the gifted.

16. Everett, Samuel (editor) *Programs for the Gifted - A casebook in secondary Education.* New York: Harper and Brothers, 1961.

A casebook dealing with theoretical dimensions of the education of gifted secondary students. Descriptions of established educational programs in the United States, Germany, England and Russia designed to enhance the education of bright and gifted children are given. A highly recommended book for teachers and administrators.

17. Fliegler, Louis A., (editor) *Curriculum Planning for the Gifted.* Englewood Cliffs: Prentice Hall, Inc., 1961.

This book presents a broad and functional approach to the development of a sound foundation for the building of curricular experiences for gifted children. An excellent book for teachers, curriculum directors and other educational personnel responsible for programs for gifted children.

18. French, Joseph (editor) *Educating the Gifted: A Book of Readings.* New York: Holt, Rinehart and Winston, Inc., 1964.

This book is a revised edition of the original, published in 1959. It offers a comprehensive survey of some of the better literature in the area of the gifted. Such topics as identification of the gifted, nature and nurture of genius, acceleration, enrichment, grouping, guidance of the gifted, creativity and underachievement are discussed by writers such as Pressey, Leonard Miller, Earl McWilliams, Elizabeth Drews, J. P. Guilford and Ruth Martinson.

19. Gallagher, James J., *Analysis of Research on the Education of Gifted Children.* Springfield: Illinois State Department of Education, 1960.

A summary of research on what is known about gifted children. Topics such as identification procedures and problems, the school's role with gifted children and unique characteristics of the gifted are discussed.

20. Gallagher, James J., *Teaching the Gifted Child.* Second section.

This is an enjoyable and easily read book covering many aspects of education of the gifted. Sections in the book deal with the gifted child and his school, content modifications, productive thinking, administration of special programs, gifted underachiever and the culturally different child. It is highly recommended reading for teachers, administrators, parents and the general public.

21. Gallagher, James J., Aschner, Mary Jane and Jenne, William, *Productive Thinking of Gifted Children in Classroom Interaction.* Reston: The Council for Exceptional Children, 1967.

This monograph reports a research study

designed to identify and classify the thought process of intellectually gifted children and their teachers. The relationship between thought processes and classroom interactions are examined by the research team and results, conclusions and implications are reported.

22. Gardner, John W., *Excellence: Can We Be Equal and Excellent Too?* New York: Harper and Brothers, 1961.

This little volume is profoundly moving, thought-provoking and challenging. It is concerned with the lack of high standards of performance in too many areas of American life, the reasons for this and what can be done to encourage excellence. This exciting book is written in a forthright, simple style, easily read and remembered.

23. Gerhard, Muriel, *Effective Teaching Strategies with the Behavioral Outcomes Approach.* West Nyack: Parker Publishing Co., 1971.

Included in this publication are discussions of strategies that can be used to adapt traditional teaching methods to make them more effective in developing thinking skills, increasing knowledge and improving learning. An excellent publication for the special teacher of the gifted as well as the regular classroom teacher.

24. Getzels, Jacob W., and Jackson, Phillip W., *Creativity and Intelligence.* New York: John Wiley & Sons, Inc., 1962.

A large portion of this book is devoted to a comparison of children who are high in creativity but not as high in IQ and the reverse. The book presents a systematic inquiry into high creative ability and its relationship to high intelligence.

25. Glasser, Joyce Fern, *The Elementary School: Learning Center for Independent Study.* West Nyack: Parker Publishing Co., Inc., 1971.

This is an excellent publication for teachers of the gifted and for regular classroom teachers who teach gifted students. It describes and graphically illustrates how to establish learning centers and to use those learning centers to assist students in acquiring knowledge and developing self-direction.

26. Goertzel, Victor and Goertzel, Mildred, *Cradles of Eminence.* Boston: Little, Brown and Co., 1962.

This book is an original study of the parentage, education, early environments and childhoods of over 400 eminent women and men of the twentieth century. Such questions as, Where do such people come from? What sort of home produces an eminent person? and, How do the famous react to school and teachers? are discussed.

27. Goldberg, Miriam L., Passow, A. Harry and Justman, Joseph, *The Effects of Ability Grouping.* New York: Teachers College Press, 1966.

This study of the effects of ability grouping reports the findings of a well conducted study of grouping for instructional purposes. It deserves the serious attention of all educators, regardless of their view on ability grouping.

28. Gowan, John Curtis and Torronce, E. Paul (editors), *Educating the Ablest.* Itasca: F. E. Peacock Publishers, Inc., 1971.

A book of readings covering such topics as the disadvantaged gifted child, the counselor's role, models for encouraging creative teaching, identification of gifted children and youth, teacher preparation and the intellectually gifted dropout.

29. Gowan, John C. Demos, George D., and Torrance, E. Paul, *Creativity: Its Educational Implications.* New York: John Wiley and Sons, Inc., 1967.

This book is a collection of readings dealing with creativity and the results of creativity research. Practical suggestions for applying creativity research in educational setting are given.

30. Gowan, John C. and Demos, George D., *The Education and Guidance of the Ablest.* Springfield: Charles C. Thomas, 1964.
This book gives a good overview of all the aspects of programming for the gifted. Also included is a discussion of modern concepts of intellect and their implications for educational planning.

31. Grost, Audrey, *Genius in Residence.* Englewood Cliffs: Prentice Hall, 1970.
The mother of Mike Grost, one of the most brilliant children identified in the United States, describes Mike's life from infancy until his graduation from the University of Michigan at age 14. A very convincing story of the need for "special" education for the gifted.

32. Guilford, J. P., *Intelligence, Creativity and Their Educational Implications.* San Diego: Robert R. Knapp, 1968.
Guilford's theory of intellect, aspects of creativity and their educational implications are discussed.

33. Harris, Ben M. and Bessent, Wailand, *In-Service Education: A Guide to Better Practice.* Englewood Cliffs: Prentice Hall, Inc., 1969.
This is a book written for the educational practitioner. Its ideas should assist educational planners in planning, organizing and conducting in-service education programs.

34. Havelock, Ronald G., *The Change Agent's Guide to Innovations in Education.* Englewood Cliffs: Educational Technology Publications, 1973.
This process-oriented book should serve as a guide to innovation for all educators who are responsible for bringing about change.

35. Henry, Nelson B., (editor) *In-Service Education.* Chicago: University of Chicago Press, 1957.
This book is part one of the fifty-sixth yearbook of the National Society for the Study of Education. It includes discussions of the need for in-service education; the role of teachers, administrators, supervisors and consultants as related to in-service education; examples of in-service programs and the organization and evaluation of such programs. An excellent book for educational planners.

36. Henry, Nelson B., (editor) *The Integration of Educational Experiences.* Chicago: University of Chicago Press, 1958.
This book is part three of the fifty-seventh yearbook of the National Society for the Study of Education. The learner's integration of educational experiences is emphasized throughout the entire book. The book challenges educators to re-examine their beliefs regarding many aspects of their instructional procedures, especially as they relate to the gifted.

37. Henry, Nelson B., (editor) *Education for the Gifted.* Chicago: University of Chicago Press, 1958.
This book is part two of the fifty-seventh yearbook of the National Society for the Study of Education. It includes scholarly selections by many well-known authorities in the field of education and the gifted child.

38. Hersey, John, *The Child Buyer.* New York: Alfred A. Knopf, 1960.
This novel, in the form of hearings before a certain state senate education committee, examines several aspects of American education and the use of high intelligence as they relate to giftedness.

39. Hitchfield, E. M., *In Search of Promise.* London: Longman Group Limited, 1973.
A report of the 1958 British Cohort study, this book includes excellent studies of parent, teacher and child attitudes as well as several complete case histories of gifted children.

40. Hoyt, Kenneth B. and Hebeler, Jean R., *Career Education for Gifted and Talented Students*. Salt Lake City: Olympus Publishing Co., 1974.

This book reports the findings of a series of conference seminars on career education and the gifted and talented. Sections provide an overview of the current status of career education and the education of the gifted and talented, deal with basic background information on career education and the gifted, explore value considerations as related to the gifted and present exemplary programs in career education for gifted and talented and implications of career education for gifted and talented students. An excellent publication for teachers, administrators and mature gifted students.

41. Kaplan, Sandra, *Providing Programs for the Gifted and Talented: A Handbook*. Ventura: National/State Leadership Training Institute, 1973.

This booklet presents an overview of procedures for designing and implementing a program for the gifted and gives items to be considered for curriculum differentiation.

42. Martinson, Ruth A., *The Identification of the Gifted and Talented*. Ventura: National/State Leadership Training Institute, 1973.

This publication presents a rationale for the identification of the gifted and suggest appropriate identification procedures. Examples of identification materials used by various school agencies are described.

43. Mallery, David, *Imaginative Teaching in Elementary Schools*. Boston: National Association of Independent Schools, 1962.

This monograph offers some practical examples of gifted teaching for gifted children. An excellent assistant for a resource teacher of the gifted or for a regular classroom teacher of gifted children.

44. McCurdy, Harold Grier, (editor) *Barbara*. New York: Ballantine Books, 1966.

Edited by McCurdy in collaboration with Helen Follett, *Barbara* is the unconscious autobiography of a child genius. The book is a collection of Barbara's writings beginning at age four.

45. Miller, Leonard M., (editor) *Guidance for the Underachiever with Superior Ability*. Washington, D. C.: U. S. Government Printing Office, 1961.

This publication is a report of a conference held by the National Education Association Project on the academically gifted. Included are suggestions on how the guidance needs and problems of the underachiever can be identified and met.

46. Newland, T. Ernest, *The Gifted in Socio-educational Perspective*. Englewood Cliffs: Prentice Hall, Inc., 1976.

Dr. Newland has written a scholarly, but personal, resource for thinking about the gifted. Included is the practical and philosophical information necessary to set up an educational program which meets the needs of gifted children from all economic social and racial backgrounds. Concepts fundamental to teaching strategies are stressed throughout the book. The practical suggestions should help educators develop lasting rather than sporadic practices for the gifted.

47. Nemiroff, Robert, (adapter) *To Be Young, Gifted and Black*. New York: New American Library, 1970.

This book is the story of Lorraine Hansberry in her own words. A playwright, Miss Hansberry is author of *A Raisin in the Sun*.

48. Parnes, Sidney J. and Harding, Harold F., (editors) *A Source Book for Creative Thinking*. New York: Charles Scribner's Sons, 1962.

Creative education, the creative process and what research has to say about it, problem-solving procedures and case

studies are the areas explored by the more than 25 authors represented in this book. This collection of 29 articles and speeches and over 75 research summaries should give the general reader and teachers at all levels both orientation and a sense of direction for their own creative thinking.

49. Raph, Jane B., Goldberg, Miriam L., and Passow, Harrow A., *Bright Underachievers.* New York: Teachers College Press, 1966.

This publication presents a two-pronged approach to the study of academic underachievement. It examines research in the area from 1925 through 1965 and describes studies of underachieving students. A very good book for counselors and teachers.

50. Renzulli, Joseph S., *A Guidebook for Evaluating Programs for the Gifted and Talented.* Ventura: National/State Leadership Training Institute on the Gifted and Talented, 1975.

This guidebook is written with several types of audiences in mind. Included are evaluation designs and concepts as well as discussions dealing with the role of evaluation and the designing of an evaluation program. Basic references and sample instruments are also given. It is an excellent publication for educators responsible for special programs for the gifted.

51. Reynolds, Maynard C., *Early Admission for Mentally Advanced Children.* Washington, D. C.: The Council for Exceptional Children, N.E.A., 1962.

This publication discusses the pros and cons of early admission to school for gifted children. Included in the bulletin are reports on several early admission programs and a review of research in the area.

52. Rice, Joseph P., *The Gifted — Developing Total Talent.* Springfield: Charles C. Thomas, 1970.

This book gives an overview of the education of the gifted. Included is an excellent discussion on talent and identification of the gifted. A good reference for parents and teachers.

Richland School District No. Two, *Implementing a Program for Gifted Children: ALERT, A Resource Approach.* Columbia, S.C., 1975.

This is a set of policies concerning the gifted child that was approved by the Columbia Board of Education.

53. Rubin, Louis J., (editor) *Improving In-Service Education: Proposals and Procedures for Change.* Boston: Allyn and Bacon, 1971.

This publication deals with the continuing education of teachers and includes an overview of some of the problems of teacher professional growth. Chapter commentaries give practical implications for in-service education and educational planners. A valuable book for principal, supervisors and administrators.

54. Sanders, Norris M., *Classroom Questions — What Kinds?* New York: Harper and Row, 1966.

This text focuses on the types of questions classroom teachers ask and the levels of thinking required by students in responding. Seven basic types of questions are defined and illustrated. The book should be a valuable aid to classroom teachers and to teachers of the gifted.

55. Sanderlein, Owenita, *Teaching Gifted Children.* New York: A. S. Barnes & Co., 1973.

In this book, a parent and teacher of the gifted addresses such questions as, "Is special education undemocratic?" and "Is genius respectable?" A book well worth reading by parents and teachers.

56. School District of Kershaw County, *New Opportunities for Gifted Children.* Camden, S. C. April: 1974.

This is a set of policies concerning the

gifted child that was approved by the Kershaw County Board of Education.

57. Shaplin, Judson T., and Olds, Jr., Henry F., (editors) *Team Teaching.* New York: Harper and Row, 1964.
In this book specialists in the field of team teaching discuss its place in education, its operation and value for the improvement and development of educational programs.

58. Smith, Donald C., *Personal and Social Adjustment of Gifted Adolescents.* Washington, D. C.: The Council for Exceptional Children, NEA, 1962.
This is a report of a research study which examined similarities and differences in the personal and social adjustment of intellectually gifted and average adolescents.

59. Stanley, Julian C., Keating, Daniel P., and Fox, Lynn H., (editors) *Mathematical Talent.* Baltimore: The Johns Hopkins University Press, 1974.
This publication gives a report on a five year study of mathematically and scientifically precocious youth. It describes ways for such youth to move at an accelerated pace through high school and college before their intellectual talents are stifled and possibly wasted.

60. Strange, Ruth, *Helping Your Gifted Child.* New York: E. P. Dutton, 1960.
This is an easily read book covering such topics as the gifted as a preschooler, an elementary child and an adolescent. The role of the parent in the education of gifted children is also discussed. This is an excellent book for parents.

61. Stephens, Thomas M., and Gibson, Arthur R., (editor) *Acceleration and the Gifted.* Columbus, Ohio: The Ohio State Department of Education.
This is a handy and valuable reference book for educators, parents and the lay public. Five projects relative to acceleration for the academically gifted are discussed by Dr. Sidney Pressey, Dr. Harry Passow, Dr. Walter Barbe and other nationally known educators concerned about the gifted.

62. Syphers, Dorothy F., *Gifted and Talented Children: Practical Programming for Teachers and Principals.* Reston: Council for Exceptional Children, 1972.
This book gives a brief overview of some current thought on education of the gifted which has grown out of research and practical experience. Included is an excellent chapter on grading. It is an excellent reference for administrators.

63. Tannenbaum, Abraham J., *Adolescent Attitudes Toward Academic Brilliance.* New York: Bureau of Publications, Teachers College, Columbia University, 1962.
This book might impress someone as a "doctoral dissertation" of Tannenbaum — very "wordy." However, with a more careful reading, the reader finds that Dr. Tannenbaum has given stimulus to the study of the effect of mental superiority on the social status of its possessor.

64. Tempest, N. R., *Teaching Clever Children - 7-11.* Boston: Roulledge and Kegan Paul, 1974.
This publication is a report on a special study of 15 gifted children, I.Q. 130 and above, in a self-contained, full-time segregated class. Activities used, observations and problems arising from this study are discussed in a practical, easy to read style.

65. Terman, Lewis M., and Oden, Melita, *The Gifted Child Grows Up.* Genetic Studies of Genius, Volume Four. Stanford: Stanford University, 1947.
An analysis of the educational and vocational histories and general adjustment of over 1,000 subjects. This book is a follow-up of major research in the area of the gifted child.

66. Terman, Lewis M., and Oden, Melita H., *The Gifted Group at Mid-Life.* Genetic Studies of Genius, Volume five, Stanford: Stanford University Press, 1960.

This volume reports the 1950 through 1955 follow-up of a study of approximately 1,000 intellectually gifted individuals begun in 1921 by Lewis Terman. The book presents an overview of the group as they were in 1955. Members of the group are now in their mid-forties. This is an excellent book for those interested in the techniques of conducting a longitudinal study on gifted children.

67. Torrance, E. Paul, (editor) *Talent and Education.* Minneapolis: University of Minnesota Press, 1960.

This is book four in the Modern School Practice series. It contains papers presented at the 1958 Institute on Exceptional Children sponsored by the Bureau of Educational Research, University of Minnesota. Such topics as the nature of abilities, enrichment of school curriculum, special grouping, acceleration, etc., are discussed.

68. Torrance, E. Paul, *Guiding Creative Talent.* Englewood Cliffs: Prentice Hall, 1962.

Many original approaches for meeting the needs and problems of the gifted who may endure loneliness and isolation in order to achieve superiority are proposed in this publication. This book is directed toward educators, counselors, school psychologists, social workers and guidance experts.

69. U. S. Department of Health, Education and Welfare, *Education of the Gifted and Talented.* Reported to the Congress of the United States, volume one, Washington, D.C., 1971.

This publication gives a status report on the education of gifted and talented children and youth in the United States. Included are recommendations for U. S. Office of Education action and four case studies of state education programs for the gifted.

70. U. S. Department of Health, Education and Welfare, *Education of the Gifted and Talented.* Report to the Congress of the United States, volume two, Washington, D. C., 1971.

This publication includes the findings of surveys and studies made in conjunction with the status report prepared for Congress. Included are sections dealing with research on gifted and talented and its implications for education, an analysis of problems and priorities, analysis of regional hearings, state laws for gifted and talented, Project Talent findings, case studies of four states with programs for the gifted, assessment of present U. S. Office of Education delivery system to gifted and talented.

71. Walsh, Ann Marie, *Self-Concepts of Bright Boys with Learning Difficulties.* New York: Bureau of Publications, Teachers College, 1964.

This publication reports the findings of a study of underachievement in school children, especially boys who, on the basis of high intelligence and social economic status, should be high achievers. Recommendations for further research in the area of underachievement are also given.

72. Ward, Virgil S., (editor) *The Gifted Student, A Manual for Program Improvement.* Atlanta: Southern Regional Education Board and Carnegie Corp., 1962.

This manual is a report of the Southern Regional Project Education of the Gifted. Included are guidelines for program development at the local level, suggestions for beginning a professional library, a composite outline of knowledge and suggested guides to reading and discussion.

73. Williams, Frank E., *Classroom Ideas.* Buffalo: D.O.K. Publishers, 1970.

This publication is filled with ideas for encouraging thinking and feeling. Also

included is a model for implementing cognitive - affective behaviors in the classroom.

74. Witty, Paul A., (editor) *The Gifted Child.* New York: D. C. Heath & Co., 1951

A comprehensive description of the problem of educating the gifted child. Included are discussions of major research in identifying and caring for these children.

75. Witty, Paul A., (editor) *Reading for the Gifted and the Creative Student.* Newark: International Reading Association, 1971.

Program suggestions appropriate to the reading characteristics of gifted children are given. Also included is an interesting chapter on family behaviors which may contribute to an early interest in reading by children.

JOURNALS

Gold, Marvin, (editor) *Talents and Gifts.* Mobile: The Association for the Gifted, University of South Alabama, 307 University Boulevard, Mobile, Alabama, 36688. Published four times per academic year.

Thomas, M. Angele, (editor) *Exceptional Children.* Reston: The Council for Exceptional Children, 1920 Association Drive, Reston, Virginia, 22091. Published eight times a year, September-May.

Aiello, Barbara, (editor) *Teaching Exceptional Children.* Reston: The Council for Exceptional Children, 1920 Association Drive, Reston, Virginia, 22091. Published quarterly.

Gowan, John C., (editor) *The Gifted Child Quarterly.* Northridge: The National Association for Gifted Children, 9030 Darby Avenue, Northridge, California, 91324. Published quarterly.

These publications are some of the journals in which articles dealing with the education of the gifted will be found. The Periodical Guides found in college, university and public libraries will contain complete listings. The professional journals of organizations such as the American Library Association and The National Association of Secondary School Principals will sometimes be devoted to one topic such as the education of the gifted.

NEWSLETTERS AND BULLETINS

Because of the quantity of newsletters and bulletins published periodically in the area of the gifted, these have been omitted from this publication. Most newsletters are printed for members of state and local organizations and may or may not have regular publication dates. An example of a national bulletin which does have a regular publication schedule is the "National/State Leadership Training Institute on the Gifted and Talented Bulletin." This bulletin is printed by the National/State Leadership Training Institute on the Gifted and Talented, Ventura County, 316 West Second St., Suite P.H-C, Los Angeles, CA 90012. It contains news of national interest.

AUDIO VISUAL AIDS

"Who is The Gifted Child?", Ventura County Schools, Ventura, CA, National/State Leadership Training Institute.
A filmstrip cassette tape presentation on the identification of gifted and talented students.

Videotapes and slide tape presentations developed as activities of Title V, Section 505 Project — "Interstate Cooperative Effort for Gifted and Talented," are available to local educational agencies in each of the 10 participating states through respective state departments of education. These are as follows.

1. "Identification of the Gifted" A videotape of a presentation by Dr. Miriam Goldberg, Columbia University.
2. "Teaching Strategies." A videotape of teaching strategies used in programs for the gifted in Florida and Georgia: Dr. Dorothy Sisk, University of South Florida, and Mrs. Shirley Johnson, Columbia County Schools, Georgia.
3. "National and State Programming." A videotape dealing with four state programs for the gifted, (Florida, Georgia, North Carolina and South Carolina); includes a review of the national picture.
4. "Identification of the Gifted and Talented." A mediated simulation (slide-cassette tape) presentation dealing with the identification, selection and placement of gifted and talented students.

Other video tapes are in production and will be available through state departments of education.

The audiovisual materials listed here are by no means all of the available aids dealing with the education of the gifted and talented. They are mainly those produced as activities connected with the Title V project. Others should be available through state media centers and libraries or for rent or purchase through commercial concerns.

EVALUATION FORM

The Georgia Department of Education would like your evaluation of this publication. Would you take a few moments to fill in and mail this self-addressed, pre-stamped sheet? Thank you.

1. Name of publication _____

2. In what way do you use this publication?

   _____Planning guide

   _____Reference material

   _____Teaching tool

3. Is the information contained in this publication available to you from any other source?

   _____yes _____no

   If yes, what source? _____

   _____

4. What information in this publication do you use?

Use	Not Use	
_____	_____	In-service education Terminology-Needs-Mistakes-Changes
_____	_____	Guiding principles for in-service education
_____	_____	Needs assessment instrument
_____	_____	Planning in-service education
_____	_____	Teacher competencies
_____	_____	Selected references

5. Could other material or topics be included that would be useful to you?

   _____yes _____no

   If yes, what materials or topics? _____

   _____

6. What is your job title? _____

Date _____

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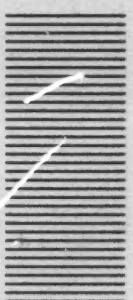

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